Claim Listing:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- (Currently Amended) A method of classifying a-communications in an application infrastructure comprising:
 - receiving a <u>first</u> communication from the application infrastructure, wherein the <u>first</u> communication includes a <u>first</u> packet;
 - determining that the first communication is associated with a first application;
 - receiving a second communication from the application infrastructure, wherein the second communication includes a second packet;
 - determining that the second communication is associated with a second application that is different from the first application examining the communication; and
 - determining that the first communication has a higher priorityizing than the second communication, wherein determining that the first communication has the higher priority is performed after determining that the first communication is associated with the first application and determining that the second communication is associated with the second application based on the examination.
- 2. (Currently Amended) The method of claim 1, wherein: the packet is prioritized based on a protocol, a source address, a destination address, a source port, a destination port, or any combination thereof
 - the first communication comprises a first set of packets including the first packet; determining that the first communication is associated with the first application is performed using the first set of packets;
 - the second communication comprises a second set of packets including the second packet; and
 - determining that the second communication is associated with the second application is performed using the second set of packets.

3. (Currently Amended) The method of claim 12, wherein:

determining that the first communication is associated with the first application further comprises: prioritizing the packet further comprises

examining the first packet; and

associating the <u>first communication packet</u> with one a first application specific <u>flow</u> of a set of application specific flows; and

determining that the second communication is associated with the second application further comprises:

examining the second packet; and

associating the second communication with a second application specific flow of the set of application specific flows.

- 4. (Currently Amended) The method of claim 3, wherein each of associating the <u>first</u> packet and associating the second packet is accomplished performed using a stream label mapping table, wherein an entry in the stream label matching table is used to maps the <u>first</u> packet to anthe <u>first</u> application specific flow, and another entry in the stream label matching table is used to map the second packet to the second application specific flow.
- 5. (Original) The method of claim 4, wherein the set of application specific flows includes types of traffic.
- 6. (Currently Amended) The method of claim 5, further comprising determining an action to be performed based on the <u>first</u> application specific flow associated with the packet.
- 7. (Currently Amended) The method of claim 36, wherein determining that the first communication has the higher priority comprises determining that the first application specific flow has a higher priority than the second application specific flow the action includes at least one of drop, motor, and inject.

- (Currently Amended) The method of claim 3, further comprising assigning an application
 weighted random discard value to the <u>second packet</u>, based on the <u>second application</u>
 specific flow-associated with the <u>packet</u>.
- 9. (Original) The method of claim 8, wherein assigning an application weighted random discard value is based on a stream rate.
- (Currently Amended) The method of claim 9, further comprising discarding the second packet based on the application weighted random early discard value.
- 11. (Currently Amended) The method of claim 10, wherein the application weighted random early discard value is based on a contention level for a port and a control value associated with the second application specific flowstream.
- 12. (Original) The method of claim 11, wherein the control value is on a logarithmic scale.
- 13. (Currently Amended) The method of claim 3, further comprising assigning a latency and a priority to the <u>second</u> packet based on the <u>second</u> application specific flow, and forwarding the <u>second</u> packet to a local component based on the latency and the priority.
- 14. (Currently Amended) An apparatus for implementing the method of claim 1. wherein the apparatus comprises:
 - a first component including a web server, an application server, a database server, or a storage network:
 - a second component including the web server, the application server, the database server.

 or the storage network, wherein the second component is of a different type as

 compared to the first component.
- 15. (Currently Amended) A data processing system readable medium having code for elassifying a communication in an application infrastructure, wherein the code is embodied within the data processing system readable medium, the code comprising: instructions for:

- from the application infrastructure is associated with a first application, wherein the first communication includes a first packet;
- an instruction to determine that a second communication from the application infrastructure is associated with a second application, wherein the second communication includes a second packet examining the communication; and
- an instruction to determine which of the first communication and the second

 communication has a higher priorityizing the, wherein the instruction to determine
 which of the first communication and the second communication has a higher
 priority is to be executed after executing the instruction to determine that the first
 communication is associated with the first application and the instruction to
 determine that the second communication is associated with the second
 application communication based on the examination.
- 16. (Currently Amended) The data processing system readable medium of claim 15, wherein: the packet is prioritized based on a protocol, a source address, a destination address, a source port, a destination port, or any combination thereof the first communication comprises a first set of packets including the first packet;
 - when the instruction to determine that the first communication from the application infrastructure is associated with the first application is executed, the first set of packets is used;
 - the second communication comprises a second set of packets including the second packet; and
 - when the instruction to determine that the second communication from the application infrastructure is associated with the second application is executed, the second set of packets is used.
- 17. (Currently Amended) The data processing system medium of claim 156, wherein:

 the instruction to determine that the first communication from the application

 infrastructure is associated with the first application further comprises: prioritizing
 the packet further comprises

an instruction to associate ing the first packet; and

an instruction to associate ing the first packet communication with one a first

application specific flow of a set of application specific flows; and

the instruction to determine that the second communication from the application

infrastructure is associated with the second application further comprises:

an instruction to examine the second packet; and

an instruction to associate the second communication with a second application

specific flow of the set of application specific flows.

- 18. (Currently Amended) The data processing system readable medium of claim 17, wherein each of the instructions to associateing the first packet and the instruction to associate the second packet is accomplished performed using a stream label mapping table, wherein an entry in the stream label matching table maps the packet to an application specific flow.
- 19. (Currently Amended) The data processing system readable medium of claim 18, wherein the set of application specific flows includes types of traffic.
- 20. (Currently Amended) The data processing system readable medium of claim 19, wherein the code further comprisesing an instructions translatable for to determine an action to be performed based on the first application specific flow associated with the first packet.
- 21. (Currently Amended) The data processing system readable medium of claim 2017, wherein the instruction to determine which of the first communication and the second communication has the higher priority comprises an instruction to determine which of the first application specific flow and the second application specific flow has the higher priority the action includes at least one of drop, meter, and inject.
- 22. (Currently Amended) The data processing system readable medium of claim 17, wherein the code further comprisesing an instructions translatable forto assigning an application weighted random discard value to the second packet, based on the second application specific flow-associated with the packet.

- 23. (Currently Amended) The data processing system readable medium of claim 22, wherein the instruction to assigning an-the application weighted random discard value is based on a stream rate.
- 24. (Currently Amended) The data processing system readable medium of claim 23, wherein the code further comprisesing an instructions translatable for to discarding the second packet based on the application weighted random early discard value.
- 25. (Currently Amended) The data processing system readable medium of claim 24, A data processing system readable medium having code embodied within the data processing system readable medium, the code comprising:
 - an instruction to examine a communication that is to be executed after receiving the communication from the application infrastructure, wherein the communication includes a packet;
 - an instruction to prioritize the communication in response to a result from the instruction to examine, wherein:
 - an instruction to prioritize the communication comprises an instruction to associate the packet with a particular application specific flow of a set of application specific flows; and
 - the packet is prioritized based on a protocol, a source address, a destination address, a source port, a destination port, or any combination thereof; and an instruction to assign an application weighted random discard value to the packet. based on the particular application specific flow, wherein:
 - the application weighted random early discard value is based on contention level for a port and a control value associated with the application stream; andthe application weighted random discard value is based on a stream rate; and an instruction to discard the packet based on the application weighted random early discard value.

- 26. (Original) The data processing system readable medium of claim 25, wherein the control value is on a logarithmic scale.
- 27. (Currently Amended) The data processing system readable medium of claim 17, wherein the code further comprisesing an instructions translatable for to assigning a latency and a priority to the second packet based on the second application specific flow, and an instruction to forwarding the second packet to a local component based on the latency and the priority.